

SEQUENCE LISTING

<110> AMRAD Operations Pty Ltd

<120> A NOVEL MAMMALIAN GENE, bcl-2, BELONGS TO THE bcl-2 FAMILY OF APOPTOSIS-CONTROLLING GENES

<130> 2096584

<140> 09/155,327

<141> 1997-03-27

<150> PN8965

<151> 1996-03-27

<160> 9

<170> PatentIn Ver. 2.1

<210> 1

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<212> DNA

<213> Mouse

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Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val

5

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31

3

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Met	Ala	Thr	Pro	Ala	Ser	Ala	Pro	Asp	Thr	Arg	Ala	Leu	Val	Ala	Asp	
1				5					10					15		
ttt	gta	ggt	tat	aag	ctg	agg	cag	aag	ggt	tat	gtc	tgt	gga	gct	ggc	96
Phe	Val	Gly	Tyr	Lys	Leu	Arg	Gln	Lys	Gly	Tyr	Val	Cys	Gly	Ala	Gly	
			20					25					30			
																•
CCC	ggg	gag	ggc	cca	gca	gct	gac	ccg	ctg	cac	caa	gcc	atg	cgg	gca	144
Pro	Gly	Glu	Gly	Pro	Ala	Ala	Asp	Pro	Leu	His	Gln	Ala	Met	Arg	Ala	
		35					40					45				
gct	gga	gat	gag	ttc	gag	acc	cgc	ttc	cgg	cgc	acc	ttc	tct	gat	ctg	192
Ala	Gly	Asp	Glu	Phe	Glu	Thr	Arg	Phe	Arg	Arg	Thr	Phe	Ser	Asp	Leu	
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gcg	gct	cag	ctg	cat	gtg	acc	cca	ggc	tca	gcc	cag	caa	cgc	ttc	acc	240
Ala	Ala	Gln	Leu	His	Val	Thr	Pro	Gly	Ser	Ala	Gln	Gln	Arg	Phe	Thr	
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cag	gtc	tcc	gac	gaa	ctt	ttt	caa	ggg	ggc	ccc	aac	tgg	ggc	cgc	ctt	288
Gln	Val	Ser	Asp	Glu	Leu	Phe	Gln	Gly	Gly	Pro	Asn	Trp	Gly	Arg	Leu	
	•			85					90					95		
														gtc		336
Val	Ala	Phe	Phe	Val	Phe	Gly	Ala	Ala	Leu	Cys	Ala	Glu	Ser	Val	Asn	
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aag gag atg gaa cca ctg gtg gga caa gtg cag gag tgg atg gtg gcc

Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala

		Leu						gac Asp									432
		130					135					140					
								ggg Gly									480
	145					150					155					160	
								gca Ala						_	_		528
	mg	Бси	my	Olu	165	ADII	тър	ALG	per	170	Arg	1111	vai	цец	175	GIÀ	
								gta							_	_	576
	Ala	Val	Ala	Leu 180	GIÀ	Ala	Leu	Val	Thr 185	Val	Gly	Ala	Phe	Phe 190	Ala	Ser	
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Lys																	
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	Phe	Val	Gly		Lys	Leu	Arg	Gln		Gly	Tyr	Val	Cys	_	Ala	Gly	
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	Pro	Gly		Gly	Pro	Ala	Ala	Asp	Pro	Leu	His	Gln	Ala	Met	Arg	Ala	
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	Ala		Asp	Glu	Phe	Glu		Arg	Phe	Arg	Arg		Phe	Ser	Asp	Leu	
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Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu 85 90 95

Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn 100 105 110

Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Glu Trp Met Val Ala 115 120 125

Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp 130 135 140



Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
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Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser . 180 185 190

Lys

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<212> DNA

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Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp

1 10 15

+++	~+ ~	~~~			~+~							L L				
				agg							-	_		_		96
Phe	Val	Gly	Tyr	Arg	Leu	Arg	Gln	Lys	Gly	Tyr	Val	Cys	Gly	Ala	Gly	
			20					25					30			
cct	ggg	gaa	ggc	cca	qcc	qcc	qac	ccq	ctq	cac	caa	acc	ato	caa	gct	144
				Pro								-	_		-	
	2	35	1				40				0211	45	1100	-1119	nια	
		33					40					43				
				ttt										_	_	192
Ala	Gly	Asp	Glu	Phe	Glu	Thr	Arg	Phe	Arg	Arg	Thr	Phe	Ser	Asp	Leu	
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gcc	gct	cag	cta	cac	gtg	acc	cca	ggc	tca	gcc	cag	caa	cgc	ttc	acc	240
				His												
65					70			_		75			3		80	
					. •					, ,					00	
	~															
				gaa												288
GIn	Val	Ser	Asp	Glu	Leu	Phe	Gln	Gly	Gly	Pro	Asn	Trp	Gly	Arg	Leu	
				85					90					95		
gtg	gca	ttc	ttt	gtc	ttt	ggg	gct	gcc	ctg	tgt	gct	gag	agt	gtc	aac	336
Val	Ala	Phe	Phe	Val	Phe	Gly	Ala	Ala	Leu	Cys	Ala	Glu	Ser	Val	Asn	
			100			_		105		•			110			
aaa	αaa	atα	aaa	cct	tta	ata	aas	422	ata	a2a	as t	+~~	2+~	~+~		204
													_		_	384
пуs	GIU		GIU	Pro	ьеи	vai		GIN	vaı	GIN	Asp	Trp	Met	Val	Ala	
		115					120					125				
tac	ctg	gag	aca	cgt	ctg	gct	gac	tgg	atc	cac	agc	agt	ggc	ggc	tgg	432
Tyr	Leu	Glu	Thr	Arg	Leu	Ala	Asp	Trp	Ile	His	Ser	Ser	Gly	Gly	Trp	
	130					135					140					
aca	σασ	ttc	aca	gct	cta	tac	aaa	gac	aaa	acc	cta	man	αaα	aca	caa	480
																±00
	GIU	£ 116	1111	Ala		TÄT	ст А	usħ	GTÀ		ьeu	GIU	GIU	ATG		
145					150					155					160	
cgt	ctg	cgg	gag	ggg	aac	tgg	gca	tca	gtg	agg	aca	gtg	ctg	acg	999	528
Arg	Leu	Arg	Glu	Gly	Asn	Trp	Ala	Ser	Val	Arg	Thr	Val	Leu	Thr	Gly	
				165					170					176		

gcc gtg gca ctg ggg gcc ctg gta act gta ggg gcc ttt ttt gct agc 576 Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser 180 185 190

aag tga 582

Lys

<210> 9

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<212> PRT

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Met Ala Thr Pro Ala Ser Thr Pro Asp Thr Arg Ala Leu Val Ala Asp

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Phe Val Gly Tyr Arg Leu Arg Gln Lys Gly Tyr Val Cys Gly Ala Gly
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Pro Gly Glu Gly Pro Ala Ala Asp Pro Leu His Gln Ala Met Arg Ala 35 40 45

Ala Gly Asp Glu Phe Glu Thr Arg Phe Arg Arg Thr Phe Ser Asp Leu 50 55 60

Ala Ala Gln Leu His Val Thr Pro Gly Ser Ala Gln Gln Arg Phe Thr
65 70 75 80

Gln Val Ser Asp Glu Leu Phe Gln Gly Gly Pro Asn Trp Gly Arg Leu 85 90 95

Val Ala Phe Phe Val Phe Gly Ala Ala Leu Cys Ala Glu Ser Val Asn 100 105 110

Lys Glu Met Glu Pro Leu Val Gly Gln Val Gln Asp Trp Met Val Ala 115 120 125

Tyr Leu Glu Thr Arg Leu Ala Asp Trp Ile His Ser Ser Gly Gly Trp
130 135 140

Arg Leu Arg Glu Gly Asn Trp Ala Ser Val Arg Thr Val Leu Thr Gly
165 170 175

Ala Val Ala Leu Gly Ala Leu Val Thr Val Gly Ala Phe Phe Ala Ser 180 185 190

Lys